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# CANADA'S MEAT and LIVESTOCK INDUSTRY

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# Foreword

Canada and the United States are active trading partners for practically all products of the livestock and meat products industry. Since livestock, meat, and meat products move with a minimum of restraints across the border, the direction of trade between countries is mainly dependent upon such factors as prices, transportation costs, and the current monetary exchange; the tariff rates imposed by both countries on practically all livestock and meat product items are generally identical. During 1965, for example, the favorable price situation in the United States relative to Canada's resulted in a substantial increase in imports of Canadian feeder cattle and beef into the United States as compared with 1964.

This study, one of a series designed to help the Department of Agriculture and the U.S. livestock industry to keep informed of developments in meat and livestock exporting countries, was prepared as a result of the author's visit to Canada in late 1965. While there, he was assisted by numerous individuals and organizations, whose help he acknowledges gratefully. They include officials of the Canadian Department of Agriculture and especially Ralph K. Bennett, Director, Livestock Division, who was most helpful in arranging for an itinerary and for valuable contacts in the livestock and meat industry. The author also wishes to acknowledge the assistance given to him by the U.S. Agricultural Attaché, Richard H. Roberts, and his assistant John C. MacDonald, who throughout the entire study gave him their utmost cooperation.

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# CANADA'S MEAT and LIVESTOCK INDUSTRY

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Livestock and meat production is one of the most important segments of Canada's overall agricultural economy. The livestock industry of Canada although much smaller than that of the United States is strikingly similar to it in every other respect. Generally, the level of cattle numbers, prices, consumption, and stocks in the two countries move in the same direction, not always, however, at the same rate. On occasions when, because of weather or other conditions, surpluses or shortages occur in one area and not in the others, the imbalance is quickly taken care of by a change in trade patterns between the two countries.

In late 1965, Canada's livestock population was made up of the following: 11.6 million cattle and calves, 5.1 million hogs, and 765,000 sheep and lambs. This is roughly one-tenth the size of the U.S. industry, with its livestock population of 106.6 million cattle and calves, 51.2 million hogs, and 26.4 million sheep and lambs.

In the postwar period, Canada has increased tremendously the number of cattle that are fully fed before they are marketed. In 1951, Choice and Good grades (mostly grain-fed cattle) made up about 25 percent of total slaughter. It is estimated that by 1965 this percentage had increased to almost 50 percent. In the United States, by contrast, about 65 percent of the table beef consumed is from grain-fed steers and heifers.

Total meat production in Canada increased from an average of 2,355 million pounds in 1956–60 to 2,780 million in 1964 and 2,875 million in 1965, with beef accounting for most of the gain. Over this period, production of veal and pork increased and mutton and lamb showed a gradual decline. Estimates for Canadian meat production indicate the total in 1965 up about 3.4 percent, beef and veal production 8.5 percent (accounting for the large gain), pork down about 4 percent, and mutton and lamb down 17 percent. With large feed supplies available in the Western Provinces and effective drought relief in the eastern feeding areas, Canadian production is expected to continue an uptrend in 1966.

The United States is, by far, the major market for livestock, meat, and meat products exported from Canada. Feeder cattle constitute the major export, but the United States is also a market for Canadian slaughter cattle, hogs, sheep and lambs, beef, variety meats, pork, lamb, and hides and skins. With the exception of feeder cattle—and depending on the price situation—Canada normally also buys these same items from the United States. In 1965, exports of cattle to the United States were up sharply from 1964: those of feeder cattle at 396,031 head, up 338 percent. Total cattle exports to the United States in 1965 were 591,800 head as compared with 214,423 in 1964.

On balance, however, Canada has in most recent years been a net importer of sheep and lambs and of beef, lamb and mutton, while pork imports often approach, occasionally surpass, exports (in contrast with the 1956–60 average). Since the 1956–60 period, the United States has been almost exclusively the source of imported sheep and lambs and of pork, and has been one of two principal suppliers of beef (along with Australia), selling at least half as much beef to Canada as it bought from Canada, for the 1956–60 average, and in most years since.

The U.S. producers affected most by the competition from Canada are cattle ranchers who produce feeder cattle. Canada also offers competition to the United States for foreign trade in hides and skins, tallow, variety meats, and breeding cattle.

Canada is expected to continue programs designed to improve and expand its livestock and meat product industry in a continuing effort to meet both rising home consumption and export market demands. Competition for the U.S. producer both in U.S. and in foreign markets, however, is not expected to increase appreciably as domestic demand rises in Canada.

# Importance of the livestock industry

Some 450,000 farms across the country produce the overall livestock and livestock products needed to supply Canada's domestic and export needs. Canada's major farm-product areas are concentrated in the western provinces of Manitoba, Saskatchewan, and Alberta, as well as in the central provinces of Ontario and Quebec. These particular areas have natural advantages for livestock raising, resulting in livestock production concentration, such as an abundant grain supply in western territories, a plentiful supply of forage production, and proximity to the major consuming areas in the central provinces.

The production of livestock and meat products is a major factor in Canada's total agricultural economy. Since 1960, sales of livestock and livestock products have provided farmers with about 50–55 percent of their total cash income, leading all other farm products.

# Livestock population

**Cattle Numbers.**—Total cattle numbers in Canada dropped slightly in the period following World War II, from 9.2 million in 1946 to 8.3 million in 1950. Since that time, they have been increasingly steadily and in December 1965 totaled 11.6 million, with milk cows at 2.8 million. The increase in Canadian cattle numbers since 1950 resulted entirely from gains in beef cattle herds, since milk cow numbers have varied only slightly. A sharp gain in Canadian beef numbers has occurred primarily for the following reasons:

1. Increased demand for beef resulting from a sharp rise in the human population and expanded per capita consumption.

2. Increased investments in livestock relative to grain farming. This originated in reduced prices and smaller markets for grains in the 1950's and early 1960's with lower cash income particularly in the Prairie Provinces.

3. Increased supplies of grains on farms.

4. Fairly good grass and forage production.

5. An export market for feeder cattle sales to the United States.

At present, beef cattle numbers are largest in Ontario, followed by Alberta and Saskatchewan. Dairy herd numbers are centered primarily in Quebec, with the Province of Ontario second and Alberta third.

**Hog Numbers.**—Canada's hog population has varied considerably during the postwar period, ranging from 3.9 million in 1948 to 6.5 million in 1959. In December 1965, it totaled 5.1 million, down from the 5.6 million in 1964 and 5.3 million in 1963. The hog census of December 1965 showed a drop of 8 percent from December 1964.

Because of the short gestation period and the fact that only limited production facilities are needed to produce hogs, farmers are able to vary production very quickly in line with existing or expected changes in consumption needs. Despite the drop in 1965, hog numbers in Canada have been trending upward since the postwar period for the same reason that has tended to augment the cattle population. However, the growth of hog population has not been as pronounced as that for beef cattle because of higher consumer preference for beef. Hog population growth has also been restrained by a tremendous expansion in the poultry industry.

The hog population of Canada is centered mainly in Ontario, Alberta, and Quebec; however, numbers are also fairly large in Saskatchewan and Manitoba.

**Sheep and Lamb Numbers.**—In December 1965, sheep and lamb numbers in Canada totaled 765,000 head, down about 8.2 percent from the 1964 population. The largest decrease occurred in the west, where numbers dropped a total of 11.4 percent from the previous year. The sheep and lamb population of Canada is centered largely in Alberta, followed by Ontario and Saskatchewan. Canada's gradual decline in sheep numbers has resulted primarily from increasingly strong competition for land from other agricultural enterprises.

# Production factors

Livestock production in Canada varies considerably among provinces; in most instances, livestock population figures are not necessarily a factor to be considered in gauging meat production in any particular province. For example, large numbers of cattle and calves that are produced for slaughter in the Prairie Provinces are regularly moved to Eastern Canada, to British Columbia, and also to the United States, when conditions permit.

However, the trend in moving cattle close to the more densely populated areas for slaughter has been reversing itself in recent years and at present new packinghouse facilities being constructed are located in the western provinces. As a result of freight rate changes made in 1961, it is generally cheaper to ship fresh meat rather than live animals from the major areas of production to the large consuming areas in the east.

In 1965 total Canadian-inspected output of red meat was up 7 percent from the previous year.

**Beef and Veal.**—Production of beef and veal has been

easing upward in recent years and in 1965 totaled 1.8 billion pounds, compared with 1.3 billion in 1956–60. It is estimated that beef production, which totaled more than half of all red meat production, was up 7.8 percent in 1965 and set a new record. Most of the increased production has moved into domestic channels in line with gains in population as well as an increase in overall per capita domestic consumption.

**Pork.**—Production of pork in Canada has remained rather stationary throughout most of the postwar period and in 1964 totaled just over 1.1 billion pounds compared with an average of 890 million pounds in 1946–50 and 980 million in 1956–60. Over this same period, pork consumption has changed very little, with yearly average per capita consumption of pork continuing at about 50 pounds. In 1965 pork production showed a decline of about 4 percent.

**Lamb and Mutton.**—Production of lamb and mutton reached a peak of about 35 million pounds in 1961. However, since that time it has been easing downward and in 1965 was about 24 million pounds, about 25 percent below the average level of production in 1956–60. Per capita consumption has risen since that time, however; it averaged about 2.8 pounds per capita in 1956–60, and has ranged between 3.0 and 3.9 pounds for the past 4 or 5 years. The difference has been made up by a large rise in imports, which in most years since 1961 have been double or more than double the 1956–60 average.

**Other Products.**—The most important byproducts of the livestock industry are lard, tallow, variety meats, and hides and skins.

Lard production in Canada, during 1964, totaled about 131 million pounds, about 10 million pounds less than that of the 1956–60 average. Production in 1965 was also down another 16 million pounds. Lard production generally increases or decreases along with pork production; however, the decline in the 1964–65 period can also be attributed to the slaughter of leaner-type hogs.

At present, Canada has about 70 plants which produced a record level of 248 million pounds of tallow in 1964. The tallow industry in Canada has been gaining in importance during recent years, as more and more of this product has been channeled into export trade as well as into new domestic channels such as production of fatty acid and the animal feed industries. It is estimated that tallow production in 1965 increased about 6 or 7 million pounds, in line with increased beef production.

Cattle hide production, at 2.9 million pieces, in 1964 was up substantially from the average of 2.4 million pieces produced in 1956–60. Over the same period, production of calf skins and sheep skins showed a decrease in line with reduced slaughter of calves, sheep, and lambs. In 1965, cattle hide and calf skin production increased by about 11 percent; however, sheep skin production dropped 17 percent.

**Feeding Operations.**—In Canada, the feeding of livestock is concentrated generally in the central and southern areas of Alberta in the west and in the southwestern parts of Ontario in the east. This concentration of feeding in these areas is due to relatively favorable climatic conditions.

In 1951, Choice and Good grades (mostly grainfed cattle) made up only 24 percent of Canada's total slaughter. However, by 1956 this percentage had increased to 37 percent; by 1963, to 52 percent; and by 1964, to a record level of 54.3 percent. In 1965, a sharp increase occurred in slaughter of female cattle, mainly cows; this resulted in an increase in the percentage of carcasses grading Utility and Manufacturing.

The expansion of feeding operations attendant on this growth of cattle raising has led generally to forcing cattlemen to become specialists in a specific type of production operation.

Before World War II, calves were kept on farms where they were born until about the age of 3 years and were then sold as grassfed beef; calves are now sold to a great extent at the age of 6 months to 1 year, at which time some enter feedlots immediately and are later sold for slaughter when they reach about 1,100 pounds at the age of 12 to 14 months. Others are wintered and put on pasture for the next summer before entering feedlots in the fall; here they are finished for later sale during the winter months or in early spring when they reach the age of about 2 years or less.

Feeds available vary from province to province. Although some corn is grown and fed in Ontario Province, barley is the principal feed grain used for fattening cattle in Canada as a whole. In the Prairie Provinces, corn has not been grown successfully because of the cold climate, except in a small section of Manitoba. In many parts of Western Canada, it is customary to mix wheat and oats with barley for fattening cattle. In Southern Alberta, byproducts from sugar beets and vegetable production are fed, along with some supplemental grain. The rangeland cattle operators also harvest a large quantity of native hay for feeding to foundation stock during the winter. In the farming regions, oat and barley straw and tame hay are fed during the winter. Some irrigated farms are beginning to grow alfalfa for pasture and hay, but total acreage is as yet relatively small.

# Domestic meat consumption

Total per capita meat consumption in Canada (excluding poultry) increased from an average of 140.7 pounds in 1956–60 to 149.0 pounds in 1965. The major consumption gain was made in use of beef, which increased from 69.3 pounds to 81.0 pounds. Over the same period, there was very little change in consumption of pork and veal, probably because of the rapid expansion in production and consumption of poultry meat. The latter apparently competed more directly with pork and veal than with beef. The consumption of variety meats in Canada, which averaged about 5.0 pounds per capita in 1956–60, has been easing downward and in 1965 totaled about 3.8 pounds.

# Exports

**Livestock.**—Canada enjoys a flourishing trade in exports of live animals, principally cattle and calves. In the 1956–60 period, this trade ranged from 57,000 head to 670,000 head, averaging 346,000. Exports to the United States in the same period ranged from 49,000 to 667,000 per year.

Current estimates indicate that total cattle and calf exports to the United States in 1965 totaled about 592,000 head. Most of the cattle Canada ships to the United States are feeders weighing between 200–700 pounds. The export market for Canadian cattle in the United States has developed for several reasons: the United States has a relatively better year-round climate and large supplies of comparatively inexpensive feed corn; in most instances, it enjoys a cost advantage in feeding cattle to finished weight. Prices paid for feeder cattle in the United States are generally higher than in Canada. Also, the demand for beef, as with personal income, has been increasing at a faster rate in the United States than in Canada.

Canada also generally exports about 4,500 head of hogs per year, mainly to nearby States in the United States. However, because of shortages in the United States, exports jumped to 8.6 thousand in 1965. The United States is also a market for live sheep and lambs when U.S. prices are favorable. Exports of sheep and lambs to the United States averaged 18,600 head for the 1956–60 period and in 1965 totaled 19,300 head.

**Beef.**—Exports of beef from Canada in 1965 totaled 92 million pounds (carcass weight equivalent) with 80 million of this total moving to the United States. Most of the beef exported from Canada is in the fresh, chilled and frozen category with minimum quantities moving out classified as pickled or cured. Exports of beef to the United States were up substantially in 1965, because of strong demand in the United States and a favorable price situation.

**Pork.**—Canadian trade in pork is mainly with the United States. In 1965, exports (including canned hams) totaled about 62 million pounds with 56 million moving to the United States. Most of the pork exported was in the fresh, chilled and frozen category with some movement of cured bacon, ham, and shoulders. Canada's trade with the United States increased in 1965, because of the favorable U.S. price situation.

**Lamb and Mutton.**—Canada exports small quantities of lamb and mutton, mainly to the United States. Total exports are usually less than 1 million pounds annually, and with domestic production easing downward, no gain in this trade can be expected.

**Tallow.**—Canada produces substantially more tallow than is needed for domestic use and in 1965 about 136 million pounds, or 55 percent of domestic production, was exported to 30 different countries. The major customer for Canada's tallow is the United Kingdom, followed by Japan, Cuba, the Netherlands, and South Africa.

# Imports

**Livestock.**—Imports of live cattle into Canada are generally very small compared with exports; the former consist mainly of U.S. purebred and slaughter cattle.

In recent years, this trade totaled less than 10,000 head per year; however, in 1964 imports jumped to almost 37,000 head, when the spread between U. S. and Canadian cattle prices widened sufficiently to attract U.S. slaughter cattle to the Canadian market. Canada is also a market for live lambs from the United States, with imports in recent years ranging between 18,000 and 49,000 head.

**Beef.**—The United States, Australia, New Zealand, and Argentina are the principal countries exporting beef to Canada. (Canadian imports exceeded exports for the 1956–60 average, and since, except for 1965, when exports to the United States rose sharply, while imports fell. Of total imports, the United States has during this period consistently supplied about one-third.)

Practically all of the beef imported from the United States is of high quality, fresh or chilled in form, and enters directly into the retail trade. Imports from other areas are usually canned beef and lower grade boneless beef for use in the processing industry. Beef imports (including canned) which have been averaging about 55 million pounds (carcass weight equivalent) per year, dropped to 18 million pounds in 1965, because of the strong demand in Europe for beef from Australia and New Zealand.

**Pork.**—Imports of pork into Canada from the United States (the only major supplier) have increased substantially in recent years and in 1964 totaled 53.7 million pounds, compared with an average of only 4.4 million in the 1956–60 period. Imports in 1965, however, dropped to 31.0 million pounds, because of the shortage of supplies, and a consequent sharp gain in prices, in the United States.

**Lamb and Mutton.**—Imports of lamb and mutton in the last 5 years have averaged about 38 million pounds, up from 17 million in 1956–60. Declining production, plus an increase in domestic requirements over this period, have been chiefly responsible for the gain in imports. Practically all of the lamb and mutton imports of Canada originate in Australia and New Zealand.

# Livestock prices

The Canadian livestock market is based on a North American economy—rather than simply a Canadian one—and is tied directly to price levels in the United States.

When fed cattle in Canada are in heavy supply and the

domestic market will not absorb the cattle at a price greater than can be made from exporting, the domestic price will drop to the level of the export base and fed cattle will then move from South Alberta to the Pacific Northwest of the United States, and from the Ontario region, mainly to northern New York State. Generally, the spread between U.S. and Canadian livestock prices must be at least 2 cents per pound at the present rate of exchange[1] for slaughter cattle, and 3½ cents for feeder cattle, before cattle will move in volume from Canada to the United States. On the other hand, when the supply of fed cattle is short, Canadians are sometimes willing to pay more than the equivalent of the U.S. price on an export basis, so then the price at Toronto will move up until live fed cattle can be brought into Canada from midwestern United States. Buying costs, including freight, duty, exchange and handling, are about Can$4.00 per hundredweight.

The prevailing price for feeder cattle in the United States always sets a floor price for feeder cattle in Western Canada. Obviously, if cattle are to go on feed in Canada, then the feedlot operator north of the border has to pay equal to or more than the export equivalent.

# Marketing livestock

Cattle and calves sold by farmers to packing plants are marketed in several different ways, depending on the method the farmer feels will give him the greatest margin of profit. Examples of the methods of selling cattle are as follows:

1. Directly to the packing plants or their sales agents;
2. Through public stockyards where a competitive price is established.
3. At country auctions.
4. Through dealers and drovers who visit farms and buy cattle for resale directly to packing plants or at public or country auctions.
5. Through cooperative or commission agents who will sell the producer's cattle for the highest price obtainable through resale at any of the above channels.

Although the public stockyards are the most important outlet for the sale of cattle, in recent years there has been a trend to market direct to plants or their agents.

# Federal regulation of sales outlets

Under the authority of the Livestock and Livestock Products Act, officially designated public stockyards are operated at key points across Canada under the supervision of the Canadian Department of Agriculture. In relation to the public stockyards, the department of agriculture specifies what type of services the stockyards must make available, the terms under which individuals or firms may trade (largely financial requirements or bonding), and the nature and kind of records that must be maintained. The department also scrutinizes the regulations imposed by the owners of the yards, the trading groups, and any charges made for services and fees collected.

# Inspection and grading

Under provisions of the Canadian Meat Inspection Act, the Federal Government maintains a staff of veterinarians and inspectors at Regional Reporting Centers throughout Canada who insure that meat for human consumption is processed under sanitary conditions and inspected for signs of disease, both before and after slaughter, and that the marketing and slaughter of animals are carried out under humane conditions.

All meat packing and processing plants engaged in interprovincial or international trade must operate under the provisions of the Meat Inspection Act. Plants that trade strictly within one province are not required to use the Federal Inspection Services but may voluntarily come under this type of service if they meet specifications which are spelled out in the Act. Plants not federally inspected are primarily the responsibility of the provincial governments.

For practical purposes, Federal meat inspection in Canada is identical with that of the United States.

Livestock grading is voluntary in Canada and is administered under the Agricultural Products Standards Act, which regulates interprovincial and international trade in agricultural products. Livestock graders are permanently stationed at the large inspected packing plants and others visit smaller plants periodically to grade hogs, beef, lamb, and mutton carcasses for the double purposes of insuring a fair return according to quality of the product, and of insuring that importing countries, retailers, and consumers may have a dependable indication of quality of the product. No charge is made for this service.

At present, eleven grades have been set up for beef, five for veal, five for lamb, seven for mutton, and eleven for hog carcasses. All livestock products moving interprovincially and into the international market must be inspected and graded by this system. Several provinces also have provisions for grading, but most of them complement federal regulations.

The established federal grades for various livestock items are as follows:

*Beef carcasses:* Choice, Good, Standard, Commercial

[1] US $1.00 equal Can $1.07.

Class 1, Commercial Class 2, Commercial Class 3, Utility Class 1, Utility Class 2, Utility Class 3, Manufacturing, Bull.

*Veal carcasses:* Choice, Good, Commercial, Utility, and Manufacturing.

*Lamb carcasses:* Choice, having four weight classes; Good, having four weight classes; Commercial, having two weight classes; Utility; Cull.

*Mutton carcasses:* Choice, having three weight classes; Good, having three weight classes; Commercial, having two weight classes; Utility; Manufacturing; Cull; and Buck.

*Hog carcasses:* Grade A; Grade B; Grade C; Grade D; Light; Heavy; Extra Heavy; Ridgling; Stag; Sow Class 1; and Sow Class 2.

# Organization of meat packing industry

The organization of the meat packing industry in Canada is very similar to that existing in the United States. At present, there are four large packing companies operating in Canada, three of which are domestic corporations and the other a subsidiary of a major U.S. packer. These large packers probably kill about 50 to 60 percent of all cattle slaughtered for human consumption. There are also about 2,100 small firms that either slaughter or else process small amounts of meat. In many instances, farmers themselves also slaughter their own animals for consumption.

Packers and canners generally have a system of sales routes which often overlap, thus resulting in extensive competition for the retailer's business. This method of sales is somewhat unique but has remained without change for many years. It is moderately difficult to enter the cattle slaughter business in Canada, however; at present several smaller companies that are comparatively new are providing strong competition throughout the entire industry.

# Government assistance programs

The Canadian Government, both federally and provincially, maintains a wide variety of programs to assist in the more efficient production of livestock.

At widely spaced experimental farms and science-service locations the Federal Government is primarily concerned with programs of research into production problems regarding livestock performance and improvement. The government also assists producers in obtaining top-quality breeding stock. The Federal Government also wholeheartedly supports 4-H Club work jointly with each provincial government and participates in many other similar improvement activities.

Livestock prices are supported. From 1944 to 1958, the authority to support prices of farm products was derived from the Agricultural Price Support Act of 1944, as amended in 1950. This Act was replaced in March 1958 by the Agricultural Stabilization Act, which established the authority for guaranteeing prices on nine agricultural products including cattle, hogs, and sheep.

For the nine key products, farmers are guaranteed a minimum return of 80 percent of a base price which is the average of prices for the previous ten-year period. The act also provides that the Governor-In-Council may agree to a higher level of support after taking into account production costs and other relevant factors.

Support prices under this Act may be made effective through government's purchase of the commodity, by deficiency payments, or through such other payments as the Governor-In-Council may order.

The last purchases of pork under this program were concluded in 1960, because prices since that time have remained above the floor level. No payments were made between 1960 and 1965. Also, the floor for cattle has been maintained at or above the mandatory level of 80 percent of the base price from the time of establishment of the act. Therefore, no measures to support the price of cattle have been put into effect. However, purchases of lamb were made under authority of the Act in 1958–59, 1959–60, 1960–61, and 1961–62. In 1962, the purchase program was replaced by a deficiency system designed to provide a national average price to producers at $18 per hundred pounds, live weight, for lambs of good quality or better in the 36- to 56-pound carcass-weight range. This was regarded as the equivalent of the previous Toronto-based level. The floor price was raised to $18.80 per hundred pounds, or over 94 percent of the base price, for 1963–64; this price was maintained throughout 1964–65 and was recently reestablished for 1965–66. The average market prices have been above support levels in recent years and no payments have been made since 1961–62.

Quality premiums are paid, as well. The Federal Department of Agriculture pays a premium on high quality pigs delivered to inspected plants or approved establishments. Under the grade standards operating until October 4, 1959, $2.00 per head was paid on Grade A pigs and $1.00 per head on Grade B1 and afterwards, following the revision of grade standards, the rates became $2.00 for Grade A and $1.00 for Grade B. However, in order to give particular encouragement to the production of Grade A pigs, the premium for that grade was revised to $3.00 per head on October 4, 1960, while premiums for Grade B carcasses were withdrawn. On September 4, 1962, the Grade A premium reverted to $2.00 per head but was raised again to $3.00, effective April 1, 1963; this is still in effect. The quality premium program is carried out on authority of orders by the Governor-In-Council and is subject to annual review and approval by Parliament.

In order to encourage sheep production, quality premiums for lambs were introduced in August 1961. The rates fixed were $2.00 for each "Canada Choice" grade carcass and $1.00 for each "Canada Good" grade carcass, weighing at least 36 pounds, but not over 52 pounds. To stimulate the production of high-quality lambs, the upper limit was raised to 56 pounds after July 1, 1962.

# Government policy

The marketing of livestock in Canada is relatively free of government control. The major role of the government, both provincial and federal, insofar as livestock is concerned, is to make and enforce sanitary and other regulations that will insure that meat and meat products are fit for human consumption. The government also enforces laws designed to protect both the consumer and the producer from unfair marketing practices. At present, The Animal Contagious Disease Act provides the authority for strict surveillance of trade in livestock products between Canada and other countries.

In addition, international trade in meat must conform with the provisions of Canada's Meat Inspection Act. According to Canadian regulations, livestock and uncooked meat may be imported from only five countries—the United States, Australia, New Zealand, Republic of Ireland, and Northern Ireland. In addition, to meet sanitary regulations, imported livestock and meat products are also subject to specific duties which are currently relatively low in relation to price levels for livestock and meats.

The Canadian tariff consists, in the main, of three sets of tariff rates—British Preferential, Most-Favored-Nation, and General.

British Preferential Tariff rates are, with some exceptions, the lowest rates. They are applied to imported commodities from British Commonwealth countries, with the exception of Hong Kong, when conveyed without transshipment from a port of any British country enjoying the benefits of the British Preferential Tariff into a port of Canada. Some Commonwealth countries have trade agreements with Canada which provide for rates of duty on certain specified goods, lower than the British preferential rates.

Most-Favored-Nation rates are usually higher than the British preferential rates and lower than the general tariff rates. They are applied to commodities imported from countries with which Canada has trade agreements. These rates would apply to British countries when they are lower than the British Preferential Tariff rates. The most important trade agreement concerning the effective rates applied to goods imported from countries entitled to the Most-Favored-Nation rates is the General Agreement on Tariffs and Trade (GATT).

General tariff rates apply to goods imported from the few countries with which Canada has not made trade agreements.

The tariff schedules included in the study show the effective Most-Favored-Nation (MFN) rates on cattle and beef and beef products for Canada and for the United States.

TARIFF SCHEDULES, CANADA AND THE UNITED STATES: Cattle, beef, and beef products

| Commodity | Unit | Canada | | | United States |
|---|---|---|---|---|---|
| | | British preferential | Special agreement | Most-favored Nation | Most-favored Nation |
| Animal, purebred for improvement of stock | *Head* | Free | — | Free | Free |
| Cattle, N.o.p.[1] | | | | | |
| —less than 200 lb. | *Lb.* | Free | — | 1½¢ | 1½¢ first 200,000 head per year, 2½¢ over. |
| —200–699 lb. | *Lb.* | Free | — | 1½¢ | 2½¢ |
| —700 lb. and over (including dairy stock) | *Lb.* | Free | — | 1½¢ | 1½¢ first 400,000 head per year; max. of 120,000 per quarter 2½¢ over. |
| Beef and veal, fresh or frozen | *Lb.* | 3¢ | — | 3¢ | 3¢ |
| Beef, pickled | *Lb.* | Free | — | 2¢ | 3¢ when 30¢ lb. or less 10% over 30¢ lb. |
| Beef, salted in barrels | *Lb.* | Free | — | Free | 3¢ over 30¢ lb. or less 10% over 30¢ lb. |
| Beef and veal, edible offal | *Lb.* | 1¢ min. 5¢ | — | 1¢ min. 5¢ | 1¢ min. when 20¢ lb. or less 5% over 20¢ lb. |
| Beef, canned | *Lb.* | 15% | Free (Aust. and N.Z.) | 30% | 3¢ min. 15% |
| Cattle hides | *Lb.* | Free | — | Free | 4% |
| Tallow | *Lb.* | Free | — | 17½¢ | 0.875¢ lb. |

[1] Not otherwise provided.

# Potential for increased production

Average consumption of beef and veal will reach about 95 pounds per capita by 1980, according to forecasts of the Economic Branch of the Canadian Department of Agriculture.[2] This compares with an average consumption of 75.5 pounds for 1958–62.

If this estimated 1980 consumption (based on anticipated population of 21 million) is to become reality, a total of 2,565 million pounds of Canadian beef and veal will be needed, or an increase of 90 percent over the amount consumed in 1958–62. The number of cattle and calves slaughtered by 1980 is expected to total 5.7 million head, up from 3.5 million in 1958–62. To produce this total and provide for exports of feeder cattle (estimated at about 600,000 head), the number of cattle on farms by June 1, 1980, is forecast at 18.0 million head, an increase of 6.5 million over 1958–62. In making these estimates it was anticipated that average beef carcass weights would increase and also that some reduction would take place in losses from disease. It is anticipated that about 15.0 million additional acres of land will be required to feed these 6.5 million cattle, after allowing for the effects of improved animal husbandry practices.

Many broad changes will be required in the Canadian livestock industry if these increased production goals are to be attained; however, there is no question that the country has the necessary resources to meet this challenge.

# Competitive aspects

The United States and Canada have a long history of mutual trade in products of the livestock and meat packing industry. Because of proximity of the two countries, as well as the relative ease with which trade moves across borders, practically all livestock items are exchanged freely, subject to minimal tariffs roughly the same in each country, the amount depending on the price situation in both countries at any particular time. The major export to the United States is feeder cattle, which have been averaging about 370,000 head per year. Shipments vary considerably from year to year and in 1958 totaled a record 671,000 head. Exports in 1965 were estimated at about 592,000 head. On the other hand, Canada on occasion imports slaughter cattle from the United States and in 1964 this total reached almost 34,000 head.

Other products that Canada buys from the United States and sells in fairly sizable quantities are sheep, swine, beef, pork, variety meats, tallow, and hides and skins.

Canada competes with the United States for trade in foreign markets, primarily for exports of the following items: breeding cattle, tallow, variety meats, and hides and skins. This competition for trade in world markets is expected to continue but not increase since Canada's home consumption needs—current and anticipated—are not expected to permit any major gain in outflow of products to world markets.

[2] *Demand for Beef in 1960 and Related Land Requirements.* Reprint, *Economic Analyst*, Vol. XXXIV, No. 4, Aug. 1964, Economics Branch, Department of Agriculture, Ottawa, 1964.

# Appendix

Table 1.—LIVESTOCK: Numbers on farms, average 1956–60, annual 1961–65

| Year [1] | Cattle and calves | Hogs | Sheep and lambs |
|---|---|---|---|
| | *1,000 head* | *1,000 head* | *1,000 head* |
| Average: | | | |
| 1956–60 | 10,360 | 5,441 | 1,065 |
| Annual: | | | |
| 1961 | 10,933 | 5,136 | 968 |
| 1962 | 11,206 | 4,993 | 886 |
| 1963 | 11,552 | 5,348 | 860 |
| 1964 | 11,900 | 5,575 | 834 |
| 1965 | 11,643 | 5,106 | 765 |

[1] As of December 1 of year shown.

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 2.—LIVESTOCK: Numbers by Province, 1965

| Province | Cattle and calves | Hogs | Sheep and lambs |
|---|---|---|---|
| | *1,000 head* | *1,000 head* | *1,000 head* |
| Prince Edward Island | 121 | 72 | 8 |
| Nova Scotia | 145 | 62 | 24 |
| New Brunswick | 127 | 39 | 16 |
| Quebec | 1,731 | 910 | 77 |
| Ontario | 3,222 | 1,965 | 206 |
| Manitoba | 1,007 | 440 | 35 |
| Saskatchewan | 1,975 | 382 | 96 |
| Alberta | 2,844 | 1,198 | 257 |
| British Columbia | 471 | 38 | 46 |
| Total | 11,643 | 5,106 | 765 |

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 3.—MEAT: Production by type, average 1956–60, annual 1961–65

| Year | Beef [1] | Veal [1] | Total beef and veal [1] | Pork excl. lard [2] | Mutton and lamb [1] | Total |
|---|---|---|---|---|---|---|
| Average: | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* |
| 1956–60 | 1,211 | 132 | 1,343 | 980 | 32 | 2,355 |
| Annual: | | | | | | |
| 1961 | 1,303 | 124 | 1,427 | 967 | 35 | 2,429 |
| 1962 | 1,297 | 122 | 1,419 | 978 | 33 | 2,430 |
| 1963 | 1,409 | 127 | 1,536 | 978 | 31 | 2,545 |
| 1964 | 1,555 | 135 | 1,690 | 1,061 | 29 | 2,780 |
| 1965 | 1,677 | 157 | 1,834 | 1,017 | 24 | 2,875 |

[1] Cold dressed weight, not including edible offal. [2] Cold trimmed weight, not including fats and edible offal.

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 4.—LIVESTOCK PRODUCTS: Production by type, average 1956–60, annual 1961–65

| Year | Lard [1] | Tallow | Variety meats | Cattle hides | Calf skins | Sheep skins |
|---|---|---|---|---|---|---|
| Average: | *Million pounds* | *Million pounds* | *Million pounds* | *1,000 pieces* | *1,000 pieces* | *1,000 pieces* |
| 1956–60 | 141 | 180 | 95 | 2,421 | 1,212 | 743 |
| Annual: | | | | | | |
| 1961 | 130 | 206 | 95 | 2,511 | 1,049 | 816 |
| 1962 | 124 | 202 | 96 | 2,502 | 991 | 764 |
| 1963 | 125 | 217 | 99 | 2,656 | 1,069 | 698 |
| 1964 | 131 | 248 | 108 | 2,933 | 1,117 | 654 |
| 1965 | 115 | 254 | 114 | 3,239 | 1,255 | 540 |

[1] Includes commercial lard production and estimated lard equivalent of rendered pork fat available from all uninspected slaughter.

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 5.—MEAT: Total and per capita disappearance by type (carcass weight), average 1956–60, annual 1961–65

| Year | Beef | Veal | Total beef and veal | Pork excl. lard | Mutton and lamb | Variety meats | Canned meats [1] | Total |
|---|---|---|---|---|---|---|---|---|
| Domestic disappearance: | | | | | | | | |
| Average: | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* | *Million pounds* |
| 1956–60 | 1,180 | 131 | 1,311 | 860 | 47 | 85 | 93 | 2,396 |
| Annual: | | | | | | | | |
| 1961 | 1,271 | 124 | 1,395 | 910 | 65 | 82 | 99 | 2,551 |
| 1962 | 1,288 | 120 | 1,408 | 925 | 71 | 78 | 98 | 2,580 |
| 1963 | 1,395 | 125 | 1,520 | 959 | 74 | 76 | 99 | 2,728 |
| 1964 | 1,516 | 133 | 1,649 | 1,001 | 65 | 74 | 106 | 2,895 |
| 1965 | 1,578 | 156 | 1,734 | 943 | 59 | 73 | 107 | 2,916 |
| Per capita disappearance: | | | | | | | | |
| Average: | *Pounds* | *Pounds* | *Pounds* | *Pounds* | *Pounds* | *Pounds* | *Pounds* | *Pounds* |
| 1956–60 | 69.3 | 7.7 | 77.0 | 50.5 | 2.8 | 5.0 | 5.4 | 140.7 |
| Annual: | | | | | | | | |
| 1961 | 69.7 | 6.8 | 76.5 | 49.9 | 3.6 | 4.5 | 4.3 | 138.8 |
| 1962 | 69.2 | 6.5 | 75.7 | 49.8 | 3.8 | 4.2 | 4.2 | 137.7 |
| 1963 | 73.7 | 6.6 | 80.3 | 50.7 | 3.9 | 4.0 | 4.4 | 143.3 |
| 1964 | 78.7 | 6.9 | 85.6 | 51.9 | 3.4 | 3.9 | 4.5 | 149.3 |
| 1965 | 81.0 | 8.0 | 89.0 | 48.7 | 3.0 | 3.8 | 4.5 | 149.0 |

[1] Canned meats (cold dressed carcass plus offal equivalent).

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 6.—LIVESTOCK: Total slaughter by type, average 1956–60, annual 1961–65

| Year | Cattle | Calves | Hogs | Sheep and lambs |
|---|---|---|---|---|
| Average: | *1,000 head* | *1,000 head* | *1,000 head* | *1,000 head* |
| 1956–60 | 2,421 | 1,212 | 7,617 | 743 |
| Annual: | | | | |
| 1961 | 2,511 | 1,049 | 7,522 | 816 |
| 1962 | 2,502 | 991 | 7,648 | 764 |
| 1963 | 2,656 | 1,069 | 7,601 | 698 |
| 1964 | 2,933 | 1,117 | 8,301 | 654 |
| 1965 | 3,239 | 1,255 | 8,042 | 540 |

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 7.—SHEEP AND LAMBS: Exports and imports by country of destination and origin, average 1956–60, annual 1961–65

| Country | Average 1956–60 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| Exports: | *Head* | *Head* | *Head* | *Head* | *Head* | *Head* |
| United States | 18,613 | 1,298 | 20,494 | 3,332 | 13,395 | 19,335 |
| Other countries | 833 | 1,231 | 5,162 | 3,268 | 1,110 | 1,059 |
| Total | 19,446 | 2,529 | 25,656 | 6,600 | 14,505 | 20,394 |
| Imports: | | | | | | |
| United States | 21,804 | 49,352 | 22,668 | 43,129 | 26,615 | 18,182 |
| Other countries | 1,293 | — | 25 | — | — | 1 |
| Total | 23,097 | 49,352 | 22,693 | 43,129 | 26,615 | 18,183 |

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 8.—BEEF: Exports and imports by country of destination and origin (carcass weight), average 1956–60, annual 1961–65

| Country | Average 1956–60 | 1961 | 1962 | 1963 | 1964 | 1965 [1] |
|---|---|---|---|---|---|---|
| Exports: | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* |
| United Kingdom | — | — | — | 0.3 | 0.1 | — |
| United States | 36.1 | 34.0 | 24.2 | 21.3 | 34.9 | 80.0 |
| Bermuda | .3 | .3 | .3 | .5 | .5 | — |
| Other countries | 2.4 | 3.2 | 3.1 | 3.5 | 7.3 | 12.0 |
| Total | 38.8 | 37.5 | 27.6 | 25.6 | 42.8 | 92.0 |

Table 8.—BEEF: Exports and imports by country of destination and origin (carcass weight), average 1956–60, annual 1961–65 (Continued)

| Country | Average 1956–60 | 1961 | 1962 | 1963 | 1964 | 1965 [1] |
|---|---|---|---|---|---|---|
| Imports: | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* |
| United Kingdom | (2) | (2) | (2) | (2) | .3 | (3) |
| United States | 19.1 | 19.8 | 18.4 | 17.7 | 18.8 | (3) |
| Australia | 16.0 | 15.9 | 23.7 | 22.7 | 13.6 | (3) |
| New Zealand | 5.6 | 8.1 | 9.2 | 11.7 | 4.8 | (3) |
| Argentina | 8.4 | 9.0 | 4.3 | 7.3 | 6.1 | (3) |
| Brazil | .1 | — | — | .2 | .4 | (3) |
| Paraguay | .7 | 1.9 | 1.2 | 2.5 | 1.4 | (3) |
| Uruguay | .3 | .5 | .2 | .8 | .3 | (3) |
| Other countries | 3.2 | .3 | (2) | .9 | 1.9 | (3) |
| Total | 53.4 | 55.5 | 57.0 | 63.8 | 47.6 | [3]18.0 |

[1] Preliminary. [2] Less than 100,000 pounds. [3] Country breakdown not available at time of publication, total estimated.

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 9.—LIVESTOCK: Exports by type, total, and to the United States, average 1956–60, annual 1961–65

| Year | Cattle and calves | | Hogs | | Sheep and lambs | |
|---|---|---|---|---|---|---|
| | Total | United States | Total | United States | Total | United States |
| Average: | *1,000 head* | *1,000 head* | *1,000 head* | *1,000 head* | *1,000 head* | *1,000 head* |
| 1956–60 | 346 | 342 | 4.6 | 3.6 | 19.4 | 18.6 |
| Annual: | | | | | | |
| 1961 | 503 | 495 | 27.6 | 2.4 | 2.5 | 1.3 |
| 1962 | 492 | 485 | 4.6 | 2.7 | 25.7 | 20.5 |
| 1963 | 279 | 272 | 3.6 | 3.2 | 6.6 | 3.3 |
| 1964 | 222 | 214 | 4.2 | 3.7 | 14.5 | 13.4 |
| 1965 | 613 | 592 | 8.6 | 8.2 | 20.4 | 19.3 |

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 10.—PORK: Exports and imports by country of destination and origin (carcass weight), average 1956–60, annual 1961–65

| Country | Average 1956–60 | 1961 | 1962 | 1963 | 1964 | 1965 [1] |
|---|---|---|---|---|---|---|
| Exports: | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* |
| United Kingdom | (2) | (2) | — | 0.2 | 0.6 | — |
| United States | 51.0 | 44.3 | 46.3 | 46.6 | 51.2 | 56.0 |
| Other countries | 14.9 | 14.1 | 6.0 | 5.6 | 7.7 | 6.0 |
| Total [3] | 65.9 | 58.4 | 52.3 | 52.4 | 59.5 | 62.0 |

Table 10.—PORK: Exports and imports by country of destination and origin (carcass weight), average 1956–60, annual 1961–65 (Continued)

| Country | Average 1956–60 | 1961 | 1962 | 1963 | 1964 | 1965 [1] |
|---|---|---|---|---|---|---|
| | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* | *Mil. lbs.* |
| Imports: | | | | | | |
| United Kingdom | — | — | (2) | 1.9 | (2) | — |
| United States | 4.4 | 41.9 | 35.6 | 87.8 | 53.7 | 31.0 |
| Other countries | .1 | (2) | (2) | (2) | (2) | — |
| Total | 4.5 | 41.9 | 35.6 | 89.7 | 53.7 | 31.0 |

[1] Preliminary. [2] Less than 100,000 pounds. [3] Includes canned hams.

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 11.—MUTTON AND LAMB: Exports and imports by country of destination and origin (carcass weight), average 1956–60, annual 1961–65

| Country | Average 1956–60 | 1961 | 1962 | 1963 | 1964 | 1965 [1] |
|---|---|---|---|---|---|---|
| | *1,000 lbs.* | *1,000 lbs.* | *1,000 lbs.* | *1,000 lbs.* | *1,000 lbs.* | *1,000 lbs.* |
| Exports: | | | | | | |
| United States | 517 | 140 | 519 | 644 | 712 | 328 |
| Bermuda | 9 | 7 | 5 | 6 | 7 | — |
| Other countries | 25 | 26 | 32 | 29 | 38 | 42 |
| Total | 551 | 173 | 556 | 679 | 757 | 370 |
| Imports: | | | | | | |
| United States | 778 | 733 | 791 | 491 | 500 | (2) |
| Australia | 7,167 | 20,270 | 24,380 | 34,443 | 25,167 | (2) |
| New Zealand | 9,213 | 12,433 | 12,745 | 13,129 | 11,987 | (2) |
| Total | 17,158 | 33,436 | 37,916 | 48,063 | 37,654 | [2]34,000 |

[1] Estimated. [2] Country breakdown not available at time of publication.

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.

Table 12.—LIVESTOCK: Imports by type, total, and from the United States, average 1956–60, annual 1961–65

| Year | Cattle and calves | | Sheep and lambs | |
|---|---|---|---|---|
| | Total | United States | Total | United States |
| | *1,000 head* | *1,000 head* | *1,000 head* | *1,000 head* |
| Average: | | | | |
| 1956–60 | 12.5 | 12.3 | 23.1 | 21.9 |
| Annual: | | | | |
| 1961 | 3.8 | 3.8 | 49.3 | 49.3 |
| 1962 | 3.6 | 3.4 | 22.7 | 22.7 |
| 1963 | 3.5 | 3.2 | 43.1 | 43.1 |
| 1964 | 36.9 | 36.8 | 26.6 | 26.6 |
| 1965 [1] | 3.8 | 3.8 | 18.1 | 18.1 |

[1] January–September.

Livestock and Animal Products Statistics, Dominion Bureau of Statistics, Ottawa.